

3.2.7 CULTURAL AND PALEONTOLOGICAL RESOURCES

Prehistoric Resources. Within the boundaries of Hanford, 248 prehistoric sites have been identified. A number of these sites have been identified along the Middle Columbia River and in inland areas away from the river but near other water sources. Some dispersed evidence of human occupation has been found in the arid lowlands. Sites include pithouse villages, campsites, cemeteries, spirit quest monuments (rock cairns), hunting camps and blinds, game drive complexes, quarries in mountains and rocky bluffs, hunting and kill sites in lowland stabilized dunes, and small, temporary camps near water located away from the river.

The NRHP lists 47 prehistoric resources at Hanford. Two of these are individual sites: the Hanford Island Site and the Paris Site. The remaining sites are divided into seven archaeological districts. Four sites, including Vernita Bridge, Tsulim, and two others, are considered eligible for the NRHP by the State Historic Preservation Officer (SHPO). In addition, a Determination of Eligibility nomination has been prepared for Gable Mountain/Gable Butte, a traditional cultural property district (DOE 1995o:4-29).

All inventory and evaluation of cultural resources at Hanford is conducted within the framework of the *Hanford Cultural Resources Management Plan* (PNL-6942 UC-600, June 1989). Archaeological surveys have been conducted at Hanford since 1926, and slightly less than 10 percent of the area has been examined. These surveys have included studies of Gable Mountain, Gable Butte, Snively Canyon, Rattlesnake Mountain, Rattlesnake Springs, and a portion of the Basalt Waste Isolation Project Reference Repository Location. Most of the surveys have focused on islands and on a 400-m (1,312-ft) wide area on either side of the river. From 1991 through 1995, the 100 Areas were surveyed, and new sites were identified. Excavations have been conducted at several sites on the river banks and islands and at two unnamed sites. Test excavations have been conducted at the Wahluke, Vernita Bridge, and Tsulim sites, and at other sites in Benton County.

Facilities could be built or upgraded adjacent to or within the 200 or 400 Areas. An archaeological survey has been conducted in all undeveloped parts of the 200 East Area and half of the 200 West Area (HF PNL 1994a:4.127, 4.128). No prehistoric sites were identified. Because most of the 200 Areas are either developed or disturbed, it is unlikely that they contain intact archaeological deposits. Most of the 400 Area is disturbed and therefore is unlikely to contain intact prehistoric or historic sites. A cultural resources survey found 12 ha (30 acres) undisturbed in the 400 Area, and no sites were identified either within the 400 Area or within 2 km (1 mi) of the 400 Area. The *Hanford Cultural Resources Management Plan* provides for survey work before construction and has contingency guidelines for handling the discovery of previously unknown archaeological resources encountered during construction.

Historic Resources. There are 202 historic archaeological sites and other historic localities identified at Hanford. Pre-Hanford-era sites and localities include homesteads, ranches, trash scatters, dumps, gold mine tailings, roads, and townsites, including the Hanford townsite and the East White Bluffs townsite and ferry landing.

Lewis and Clark were the first European-Americans to come to this region, during their expedition of 1803 to 1806. Fur trappers soon followed. In the 1860s, settlement began in the area. Chinese miners came to work the gravel bars for gold. Farmers and cattlemen came to the area in the 1880s. The towns of Hanford, White Bluffs, and Ringold were established and grew. Two additional ferry operations, one at Wahluke and one at Richland, were established. The Hanford Engineering Works, a part of the Manhattan Project, was established in 1943. During that year, the residents were evacuated and nearly all the structures were subsequently razed. Pu produced at the Hanford 100 B-Reactor was used in the first nuclear explosion, at the White Sands Missile Range in New Mexico, and later in the bomb that was dropped on Nagasaki, Japan (DOE 1995o:4-32). The Hanford 100 B-Reactor is listed as a National Mechanical Engineering Landmark, a National Historical Civil Engineering Landmark, a National Nuclear Engineering Landmark, and is listed on the NRHP (HF PNL 1991a:6-3).

Because Hanford played an important role in the Manhattan Project and the subsequent Cold War Era, a number of its structures may be eligible for the NRHP. Although not all of these structures meet the Secretary of the Interior's 50-year requirement for eligibility, they fall under the broad themes of the Manhattan Project and Cold War Era nuclear production. They include buildings and structures found mainly in the 100, 200, and 300 Areas.

The historic White Bluffs Freight Road, once an Indian road, crosses diagonally through the 200 West Area. The road has been determined NRHP-eligible by the SHPO, but the segment in the 200 West Area is considered a noncontributing element. A 100-m (328-ft) easement protects the road. Manhattan Project and Cold War Era structures are in the 200 Areas; they have not been evaluated for NRHP eligibility.

Native American Resources. Because of its location on the Columbia and Yakima Rivers, Hanford has been home to Native Americans for thousands of years. The Wanapum and the Chamnapum band of the Yakama tribe lived along the Columbia River at what is now Hanford. Some of their descendants still live nearby at Priest Rapids, northwest of Hanford. Other groups that visited or lived intermittently at Hanford include the Palus, who lived on the lower Snake River, the Walla Walla, the Nez Perce, and the Umatilla (DOE 1995o:4-31). All these people retain secular and religious ties to the area. The Yakama, Umatilla, and Nez Perce have all been declared "Affected Indian Tribes," as defined in the NHPA of 1982. As such, these tribes and the Wanapum people, who live about 8 km (5 mi) west of the Hanford boundary, are active in decisions regarding the site. The tribes have expressed concerns regarding hunting, fishing, and pasture rights and access to plant and animal communities and important sites (HF DOE 1990e:2-20).

The Washane, or Seven Drums religion, originated among the Wanapum people on what is now Hanford and is still practiced by many people on the Yakama, Umatilla, Warm Springs, and Nez Perce Reservations. The first Washane ceremony took place at Coyote Rapids (HF DOE 1990e:3-60). Certain indigenous plants and animals found at Hanford are used in religious ceremonies. Sites sacred to Native Americans at Hanford include remains of prehistoric villages, cemeteries, ceremonial longhouses or lodges, rock art, fishing stations, and vision quest sites. Culturally important localities and geographic features include Rattlesnake Mountain, Gable Mountain, Gable Butte, Goose Egg Hill, Coyote Rapids, and the White Bluffs portion of the Columbia River.

Paleontological Resources. There are three geologic units at Hanford: the Columbia River Basalt group, the Ringold Formation, and the Hanford Formation. Pliocene and Pleistocene Age remains have been identified at Hanford. The Upper Ringold Formation dates to the Late Pliocene and contains fish, reptile, amphibian, and mammal fossil remains. Late Pleistocene Tule beds have yielded mammoth bones. These beds are composed of fluvial sediments deposited along ridge slopes that surround Hanford.